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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,776	08/25/2003	Satoshi Honda	0505-1236P	1097
2292	7590	06/05/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			PARRIES, DRU M	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 8 and 9, filed April 13, 2006, with respect to the rejection(s) of claim(s) 1 and 11 under 35 USC 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Gale et al. (6,674,180).
2. Applicant's arguments, see page 8, filed April 13, 2006, with respect to claims 8 and 18 have been fully considered and are persuasive. The 112 rejections of claims 8 and 18 have been withdrawn.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4, 11, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Gale et al. (6,674,180). Gale teaches a vehicle power supply system for driving an electric motor (32) and other vehicle equipment (26, 28). He teaches an intermediate voltage application means for setting a line defined by an intermediate voltage (0V), between a drive voltage (42V) and a ground voltage (-42V), as a ground line for the other vehicle equipment (26). He also teaches power supply means for producing a voltage to be applied to said other vehicle equipment (26) (Col. 2, lines 19-23) based on the drive and intermediate voltage. He also teaches a node (N2) for providing the vehicle power supply.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 3, 5, 6, 7, 12, 13, 15, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale et al. (6,674,180) and Welches et al. (2003/0012038). Gale teaches a vehicle supply system as described above. Gale also teaches that the batteries (14 and 20) could be of varying voltages (i.e. 12V, 24V, 36V, etc.) (Col. 2, lines 8-11). Gale fails to teach the voltage being supplied to the other vehicle equipment being Pulse Width Modulated (PWM) or the use of an inverter. Welches teaches a DC-DC converter with an inverter to adjust the voltage applied to a load from a battery. He teaches the use of PWM to adjust the voltage being output to a load (Abstract and [0010]). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method, used in Welches, in Gale's invention so that the voltage output to the other vehicle equipment is precise and for improved and efficient power generation.

Allowable Subject Matter

7. Claims 8-10 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. No prior art of record teaches the limitations claimed in the above claims with motivation to combine them with the main reference.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hwang (2002/0003525) teaches a power supply circuit for driving a load containing an oscillator, photo-coupler, FETs, diodes, capacitor and resistors.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dru M. Parries whose telephone number is (571) 272-8542. The examiner can normally be reached on Monday -Thursday from 8:00am to 5:00pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached on 571-272-2800 x 36. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMP

5-23-2006



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